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ABSTRACT

Adolescent determination of behavior can be viewed as the result of perceived locus of control. To investigate adolescent perceptions of control in terms of age, loci of control (internal or external), situations (community and home), and direction of control (from or over the environment), 909 adolescents (345 males, 564 females), aged 11-19, were administered the Tiffany Experienced Control Scales (ECS), which rate perceptions of control on a 10-point scale. An analysis of the results showed that adolescents have a nonlinear perception of control in which they perceive control differently from situation to situation and across ages. In addition, adolescent perceptions of loss of control over and from both internal and external forces is unidirectional, i.e., when one goes up or down, so does the other. Males had higher control scores than females at the internal locus, and across all ages males were more volatile than females. Both males and females perceived themselves as having less internal and external control in the community and more control in the home. Females experienced highest control at ages 13 (community) and 19 (home). Males experienced highest control at age 13 (community and home). (BL)

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Experienced Control in Pre-adolescent and Adolescent Age Males and Females

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Experienced Control in Pre-adolescent and Adolescent Age Males and Females

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An issue of primary concern to developmental psychology is whether a continuity model (Wolman, 1982) is more efficacious than a discontinuity model in understanding developmental phenomena.

In 1974 Tiffany tested research assumptions relating Experienced Control (EC) as measured for 160 adolescents on the situation SAME SEX and OPPOSITE SEX and found sex differences to be significant between male and female subjects and across ages. She further found that changes in perception of control over the environment decreased with age and control from the environment increased with age. In looking at control across the total life span from ages 11 to 99, adolescents do not perceive control in the same manner as adults. Adults (Tiffany, 198 change the direction of their control several times across the life span. In an effort to better understand if and how differences occur among adolescents a sample of 909 adolescents were assessed using the Experienced Control Scale.

Tiffany (1965) and Tiffany, Shontz, & Woll (1969) developed a model of control focusing on perceived control as an experiential construct. The model of perceived control is conceptualized as consisting of four components: (a) control from inner (FI) organismic states, such as impulses; (b) control (OI) over these states; (c) control over (OE) the environment; and (d) control from (FE) the environment. A high degree of control over internal and external forces represents self-determined behavior, whereas high control from internal and external forces represents non-self determined behavior. Studies depicting the four areas of control in a variety of situations significantly differentiated Admissions and Pre-discharge psychiatric patients, the latter group having

the higher mean scores in control over internal and external forces (Tiffany, 1967). Subsequent studies similarly differentiated a group of vocational problem cases with histories of chronic job hopping from a socio-economically comparable group of clients who had been employed one year, with the latter group showing significantly higher scores in their control over themselves and their environment (Tiffany, Cowan, & Tiffany, 1970). The authors also found that individuals who generally obtain high powerless scores were more prone to react impulsively under increased stress conditions.

Balance may occur at either the Internal or External loci, separately or at the same time but complete balance need not be maintained to insure psychological soundness. Balance is relative to the situation. Each loci includes impersonal, non-self directed forces and willful, self directed forces. It does not relate theoretically or empirically to Rotter's (1965) I-E expectancy model (Tiffany, et al., 1970; Tiffany & Markley, 1975).

While the concepts underlying the two scales are not as similar as they may at first seem, both generalized expectancies of control and experienced control are necessary dimensions for providing measures of powerlessness from a social-psychological perspective. What is lacking at this point are environmental measures of external forces operating above and beyond the individual's own form of reference to provide adequate indexes for assessing the magnitude of environmental pressures.

In adolescents, perceived control from internal would be awareness of primary sexual changes and certain related feeling states such as anxiety and frustration. Pain and hunger would also be included. The feeling states could be described as the "touchy" behaviors so often attributed to teenagers. Such responses can be seen in the concerns of middle adolescents who are either slow in their physical development or ahead of peers yet not ready to move into associations with older adolescents. Control over internal forces,

represented by OI, is control an individual has over these inner states as a form of self regulation. The older adolescent who has gained a sense of identity and incorporated changes related to physical characteristics would be expected to have increased control over his internal forces compared to a year or two earlier when he or she was anticipating yet unexperienced changes, such as puberty. His associations with others will become more stable and comfortable. Control over the environment is the control an individual exerts over the environment, such as with the use of acquired skill or knowledge. The development of sport skills, ability to learn money, and an increasing amount of self-supervised time would add to the adolescents control over the environment. Control from the environment are seen, for example, in the adolescent as dependence on environmental factors for direction, such as conformity in regard to peer pressures. These environmental forces become personified as parent teacher, employer, sibling, rules, physical obstacles, etc. The desire to be an adult, the desire to remain dependent, the awareness of increased skills yet recognition of increased demands from others are a constant concern and what decisions to make about the future and doubts about ones ability to carry them out, represents some of the struggles betweem the four forces or components that result in the individual in our society that so many people refer to disparagingly as the "teenager."

Method

Design. The independent variables were: (1) comparisons of age, (2) loci and kind of control, (3) situations, and (4) direction of control. The dependent variables were the raw scores and the ratio scores (OI/FI and OE/FE).

Situations. Situations are HOME, WORK, SCHOOL, OPPOSITE SEX, SAME SEX, OTHER PEOPLE, COMMUNITY, AND GENERAL. For this study, only situations COMMUNITY and HOME have been analyzed. One study (Tiffany, 1982) has demonstrated that

subjects think in terms of Business/Civic Leaders and Family Status for situation COMMUNITY and parents and/or siblings for situation HOME.

Subjects. A total of 909 subjects were drawn from a non-psychiatric population. Subjects ranged from age 11 to 19. Number of subjects by age and sex are included in Tables 1 and 2.

Questionnaire. Dependent measures were obtained from the Tiffany FI Scales (Tiffany & Tiffany, 1970). Each of 32 items are presented on a 100 millimeter scale on which the subject is asked to estimate the magnitude of the control s/he feels. The scale beginning with "LOW" and "0" at the left extreme and extending to "HIGH" and "100" at the right extreme, is also marked at intervals of 10. The center point is labeled "about average". The subject is asked to "put a mark anywhere on the scale near the number that you think best tells how much control you feel."

Scoring. The component scores were determined from the location of the subject's mark on each item scale. The component scores were then used to obtain ratios for the internal (OI/FI) loci and for the external (OE/FE) loci. Ratios are always converted to common logs to correct for asymmetry in distribution when statistical anaylses are used.

Results

Analysis. Component and loci means were computed for each individual age mean score. (Table 1 and 2) An addition analysis, computation of 5th degree polynomials, using each individual score was carried out to determine the line of best fit, for all groups from ages 11 to 19. F's for male subjects (Table 3) were significant (COMMUNITY, internal, F= 5.286; external, F= 8.546 HOME, internal, F= 6.439; external, F= 13.786), and for female subjects (COMMUNITY, internal, F= 3.544; external, F= 8.534: HOME, internal, F= 5.612; external, F= 9.260), demonstrating the nonlinear perceptions of control across adolsecence.

Table [1]

Mean Component Scores and Ratios by Age and Sex: COMMUNITY

Age Groups

MALES

Age	11	12	13	14	15	16	17	18	19
N=	16	42	68	40	17	17	34	69	42
FI	50.81	41.07	44.81	35.53	63.12	43.94	42.56	20.14	23.45
OI	71.69	64.36	69.06	63.63	57.82	57.59	67.59	24.67	36.64
Internal Ratio	1.49	1.49	1.90	1.81	1.01	1.11	1.88	1.07	1.32
OE	50.06	58.36	65.47	58.20	61.24	56.65	54.47	24.59	34.10
FE	44.87	56.09	61.90	61.50	56.29	55.71	49.97	15.02	30.00
External Ratio	.91	1.59	1.66	1.28	.98	1.18	1.19	1.18	1.33

FEMALES

N=	15	54	83	38	17	17	66	179	95
FI	43.53	43.09	41.59	51.34	46.53	52.24	40.71	13.66	25.01
OI	66.67	63.37	63.73	65.13	62.18	69.82	52.80	18.21	35.66
Internal Ratio	1.54	1.75	1.78	1.35	1.41	1.38	1.36	1.11	1.27
OE	54.94	42.19	44.91	46.56	60.88	42.35	47.26	18.23	23.50
FE	61.87	42.70	43.05	51.18	47.24	51.00	40.56	13.66	23.11
External Ratio	.70	1.36	1.66	1.28	1.26	1.01	1.29	1.02	1.19

Table 2

Mean Component Scores and Ratios by Age and Sex: HOME

Age Groups

MALES

Age	11	12	13	14	15	16	17	18	19
N=	16	42	68	40	17	17	34	69	42
FI	56.25	47.24	43.31	45.25	49.29	45.29	50.68	55.35	52.74
OI	63.38	65.0	68.19	57.08	63.24	66.29	61.82	67.22	70.05
Internal Ratio	1.15	1.51	1.86	1.18	1.29	1.61	1.25	1.28	1.59
OE	42.88	51.48	63.78	56.30	60.0	69.65	65.97	65.38	61.0
FE	50.50	51.17	54.91	46.55	50.82	53.29	53.44	50.28	45.31
External Ratio	.95	1.00	1.23	1.29	1.18	1.39	1.31	1.46	1.55

FEMALES

N=	15	54	83	38	17	17	66	179	95
FI	54.93	52.67	54.20	54.05	48.82	48.24	53.18	53.21	49.17
OI	59.40	61.56	59.41	64.0	58.94	60.94	62.30	65.60	68.54
Internal Ratio	1.10	1.22	1.07	1.13	1.23	1.35	1.19	1.35	1.69
OE	39.80	56.43	55.05	58.61	60.71	63.35	58.56	65.26	64.22
FE	50.67	51.63	46.06	55.63	44.76	60.24	56.74	51.74	48.58
External Ratio	.78	1.08	1.24	1.04	1.38	1.06	1.02	1.47	1.51

Table 3

F's for Significant 5th Degree Polynomials

	Males		Females	
	Internal	External	Internal	External
COMMUNITY	5.386*	8.546*	3.548*	8.534*
HOME	6.439*	13.784*	5.612*	9.259*

* significant p .01

The balance for situation COMMUNITY at the Internal Locus is 1.47 for males; 1.40 for females. At the External Locus for both males and females it is 1.29, contrasted with 1.38 for all subjects across the life span. The balance for situation HOME at the Internal Locus is 1.33 for males and 1.22 for females. at the External Locus it is 1.20 for males and 1.18 for females. These ratios illustrate more control over than from for all non-psychiatric populations.

Two-tailed tests of differences between males and females (Table 4) are not significant between specific ages, except for situation COMMUNITY, internal, age 14 (t = 1.81; .05 p .10), age 17 (t = 1.80; .05 p .10), HOME, internal, age 13 (t = 3.71; p .01), external, age 17 (t = 1.66; .05 p .10).

Table 4

Student t's for Significant Male-Female Ratio Scores by Age

	Internal		External
Age	13	14	17
COMMUNITY		1.81**	1.80**
HOME	3.71*		1.66**

* significant at p .01
**significant at .05 p .10

Internal vesus External Loci

Internal and external perceptions vary within and across situations, (Figures 1 through 4). Males have higher control scores than females at the Internal Locus but over all differences are not significant. Across the nine year age span male adolescents are more volatile than females at the Internal Locus but few differences appear at the External Locus. Females are less similar across Loci but are more consistent across ages. They loss

in their perceptions of control at the Internal and External Loci for COMMUNITY and gain at the Internal and External Loci for HOME. Males gain in control for the situation HOME across ages at both the Internal and External Loci but drop at both Loci for situation COMMUNITY.

Females ratios are lowest at ages eleven, sixteen and eighteen at the External Locus and at eighteen (COMMUNITY) and thirteen (HOME) at the Internal Locus. Their highest experiences of control are at ages thirteen (for Internal COMMUNITY), nineteen (Internal HOME), thirteen (External COMMUNITY) and, nineteen (External HOME). Male ratios are generally lowest at age fifteen and highest at age thirteen.

Analysis of component scores. In order to understand the change in ratios, it is necessary to determine where over and from scores change, (Tables 3 and 4). Scores for the situation COMMUNITY at the External Locus show males experiencing the least amount of control from (24.59) at age eighteen. At the same time, control over (15.02) decreases. Even through the component scores are quite low the ratios are relatively high because both over and from perceptions change together. While the eighteen year old male may experience a loss of control over it is still greater than control from the environment. The Internal Locus of the eighteen year old male drops downward sharply as well.

This ratio is one of the lowest he experiences during adolescence with the exception of age 15. Ratios are low (Internal = 1.01 and External= .98) even through component scores remain high (from Internal 68.12, over Internal 57.82; over External 61.24, from External 56.29).

The ratio scores for females increases across the adolescent years for the situation HOME. This increase reflects the change in the scores for component over Internal (68.54) increasing while from Internal (49.17) decreases. For the situation COMMUNITY, female subjects raise in their control ratios not because of change in control over at the Internal Locus, but because

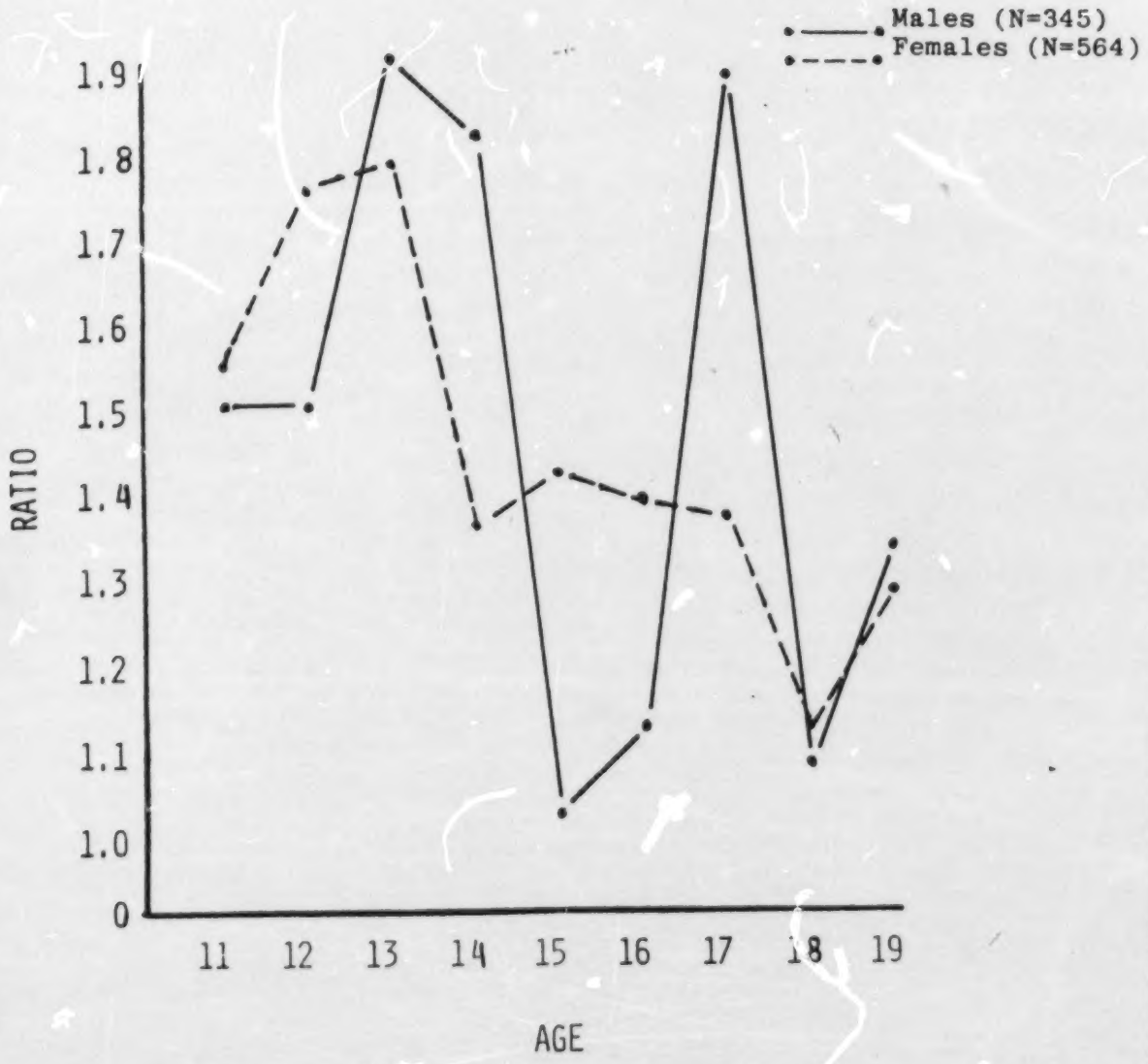

Fig. 1. Internal Ratios by Age for Males and Females for the COMMUNITY Situation.

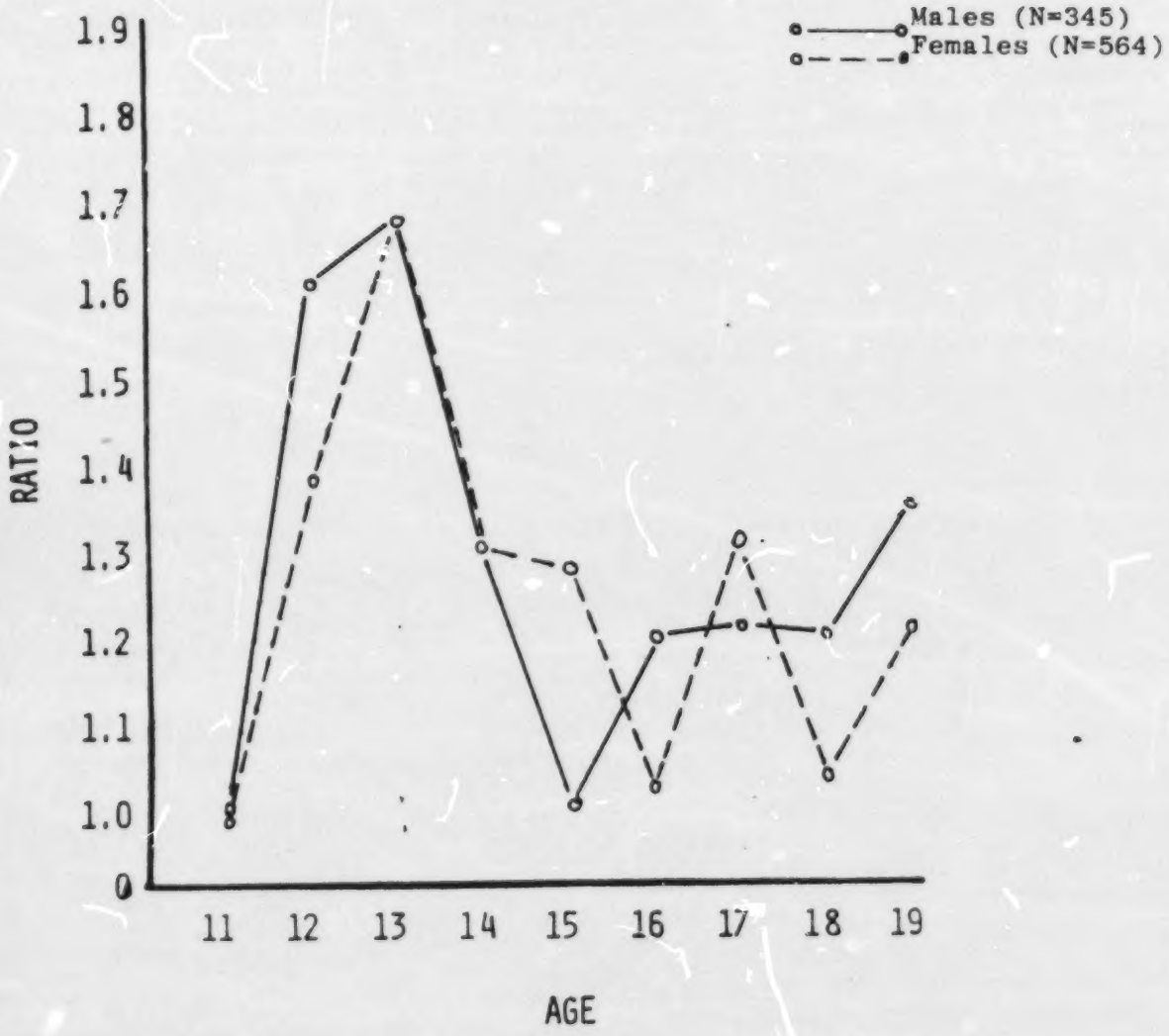

Fig. 2. External Ratios by Age for Males and Females for the COMMUNITY Situation.

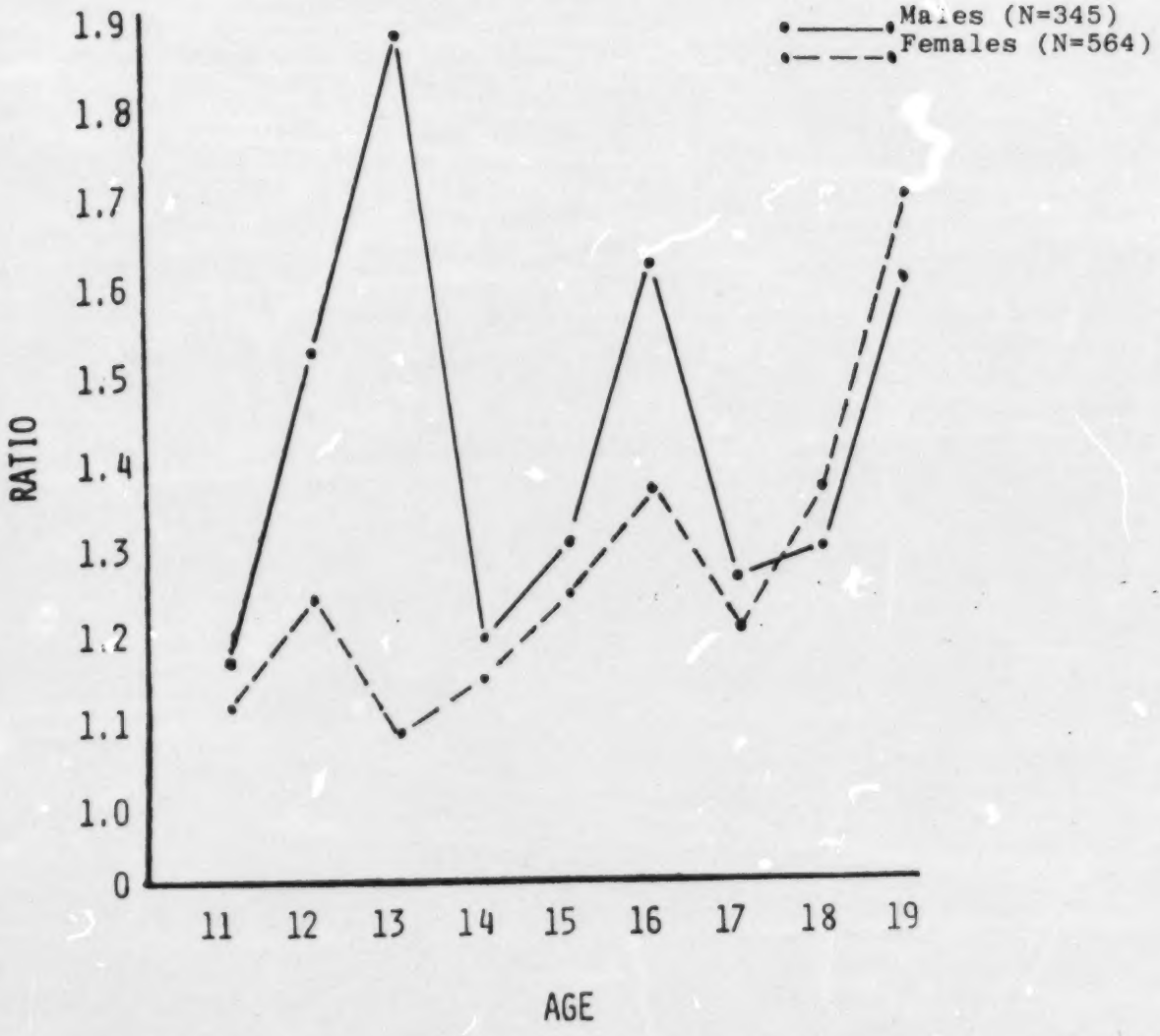

Fig. 3. Internal Ratios by Age for Males and Females for the HOME Situation.

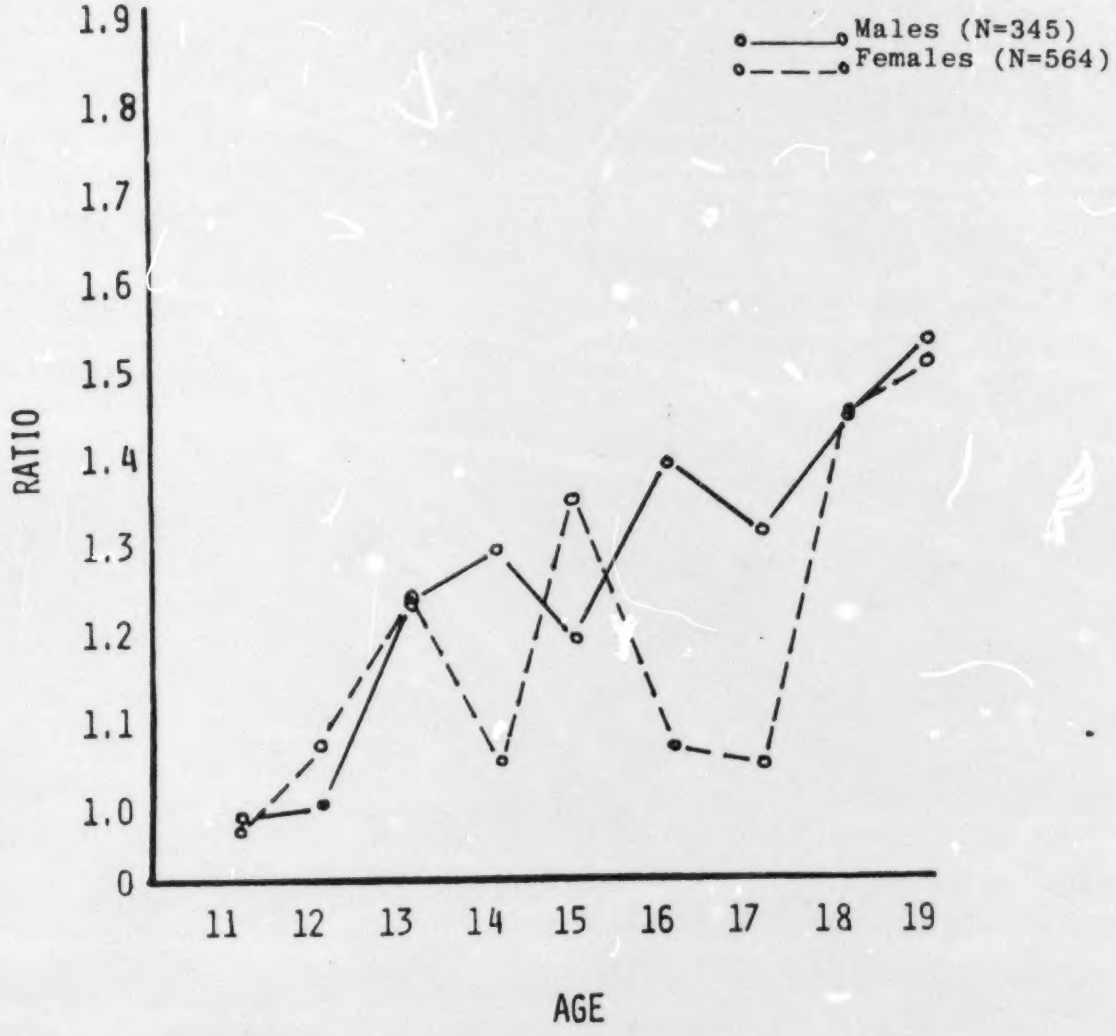

Fig. 4. External Ratios by Age for Males and Females for the HOME Situation.

of control from at the External Locus.

Conclusions

Adolescents differ from adults in perceiving loss of control over and from both internal and external forces. That is when one goes up or down the other tends to move in the same direction. Tiffany (1983) has found that adults show changes in ratios primarily because of loss of perceived control over. However, the volatile aspect of male perceptions are consistent across the life span. Females loss of control with age possibly reflect the change in the protective environment females experience while still at HOME. The increased control which males experience with later adolescence reflects the acceptance of greater responsibility and their own skills to met that responsibility.

This research has demonstrated that adolescent subjects perceive control in their lives differently from situation to situation and across ages 11 through 19. The non-linearity of control in adolescence has been supported. Further research would help relate each component to adolescent behavior in order to better understand why adolescents perceive the world in the way that they do.

References

Rotter, J. B., Social learning and clinical psychology. Englewood Cliffs, N. J.: Prentice-Hall, 154, Monograph, 1965.

Tiffany, D.W. Mental Health. A function of Experienced Control. Journal of Clinical Psychology, 1967, 23, 311-315.

Tiffany, D.W., Shontz, F.C. & Woll, S.B. A model of control. Journal of General Psychology, 1969, 81, 67-82.

Tiffany, D.W., Cowan, J. & R., Tiffany, P.M. The unemployed: A social-psychological portrait, 1970, pp. 80-84. Englewood Cliffs: Prentice Hall.

Reference Notes

Tiffany, D.W. Experienced control: A significant personality variable, Doctoral Dissertation, University of Kansas (Ann Arbor, Michigan: University Microfilms, 1965), No. 66-6056

Tiffany, D.S. & Tiffany, P.G. Tiffany Experimental Control Scales @ 1970

Tiffany, P.G. & Tiffany, D.W. Changing patterns of experienced control in adolescence. Paper presented at RMPA meeting, Denver, Colorado, 1974.

Tiffany, D.W. & Markley, R.P. The place of locus of control within experienced control. Paper presented at the APA, Chicago, Illinois, 1975.

Tiffany D.W. & Tiffany P.G. Marital couples experience of control. Unpublished manuscript. 1982, Fort Hays State University.